Overview

Boeing Global Services

Worldwide presence

- 300+ locations
- 70+ countries
- 40+ US states

Efficient performance

- Faster customer response
- Operational agility
- Competitive cost structures

Robust service capabilities

- Headquartered in the Dallas, TX area
- Approximately 20,000 employees
- Government and commercial business areas

- Digital Aviation & Analytics
- Engineering, Modifications & Maintenance
- Training & Professional Services
- Supply Chain

A dedicated services business focused on the needs of global defense, space, and commercial customers.
Airplane market trends

Balanced growth

Productivity and innovation

Replacement
Airlines will need 42,700 new airplanes valued at $6.3 trillion

Airplane deliveries: 42,700

<table>
<thead>
<tr>
<th>Airplane Type</th>
<th>Units</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-aisle</td>
<td>31,360</td>
<td>73%</td>
</tr>
<tr>
<td>Widebody</td>
<td>8,070</td>
<td>19%</td>
</tr>
<tr>
<td>Regional jet</td>
<td>2,320</td>
<td>5%</td>
</tr>
<tr>
<td>Freighter</td>
<td>980</td>
<td>2%</td>
</tr>
</tbody>
</table>

New airplane values: $6,350B

<table>
<thead>
<tr>
<th>Airplane Type</th>
<th>Values</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-aisle</td>
<td>$3,480B</td>
<td>55%</td>
</tr>
<tr>
<td>Widebody</td>
<td>$2,480B</td>
<td>39%</td>
</tr>
<tr>
<td>Regional jet</td>
<td>$110B</td>
<td>2%</td>
</tr>
<tr>
<td>Freighter</td>
<td>$280B</td>
<td>4%</td>
</tr>
</tbody>
</table>

NOTE: Market share may not equal 100% due to rounding.
Market for new airplanes to become even more geographically balanced

New airplane deliveries by region

<table>
<thead>
<tr>
<th>Region</th>
<th>Airplanes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia</td>
<td>16,930</td>
</tr>
<tr>
<td>North America</td>
<td>8,800</td>
</tr>
<tr>
<td>Europe</td>
<td>8,490</td>
</tr>
<tr>
<td>Middle East</td>
<td>2,990</td>
</tr>
<tr>
<td>Latin America</td>
<td>3,040</td>
</tr>
<tr>
<td>Russia/CA</td>
<td>1,290</td>
</tr>
<tr>
<td>Africa</td>
<td>1,190</td>
</tr>
<tr>
<td>World Total</td>
<td>42,730</td>
</tr>
</tbody>
</table>

Market value by region

<table>
<thead>
<tr>
<th>Region</th>
<th>$B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia</td>
<td>2,670</td>
</tr>
<tr>
<td>North America</td>
<td>1,100</td>
</tr>
<tr>
<td>Europe</td>
<td>1,240</td>
</tr>
<tr>
<td>Middle East</td>
<td>660</td>
</tr>
<tr>
<td>Latin America</td>
<td>360</td>
</tr>
<tr>
<td>Russia/CA</td>
<td>150</td>
</tr>
<tr>
<td>Africa</td>
<td>170</td>
</tr>
<tr>
<td>World Total</td>
<td>$6,350B</td>
</tr>
</tbody>
</table>
Pilot and Technician Outlook methodology

Commercial Market Outlook

Aircraft utilization

Crew requirements

Regulatory requirements

Operator business models

2018 – 2037 Pilot & Technician Outlook
Demand for new civil aviation pilots
Trends indicate a softening of replacement demand in second decade

**Commercial:** 240,000

**Helicopter:** 14,000

**Business:** 7,000

**APAC Demand: 261,000**

- **NE ASIA:** 20,750
- **CHINA:** 128,500
- **SOUTH ASIA:** 42,750
- **SE ASIA:** 48,500
- **OCEANIA:** 20,500
Demand for new civil aviation technicians
737 MAX product development advancements lead to maintenance efficiencies

2018 - 2037
World Demand: 257,000

- Commercial: 242,000
- Helicopter: 9,000
- Business: 6,000

Countries:
- CHINA: 126,750
- SOUTH ASIA: 35,000
- NE ASIA: 23,750
- SE ASIA: 54,000
- OCEANIA: 17,500
Demand for new civil aviation cabin crew
Cabin densification and multi-cabin configurations continue to drive demand

2018 - 2037
World Demand: 321,000

Commercial:
317,000

Business:
4,000

NE ASIA
33,250

CHINA
147,250

SOUTH ASIA
43,250

SE ASIA
76,250

OCEANIA
21,000
Boeing Global Services Training Worldwide

Key:
- Development Offices
- Commercial Training Campuses
- Pro Forma Commercial - Flight Training Campuses
- Pro Forma Commercial - Maintenance Training Campus
- Pro Forma Commercial - Training Campus for 787 Only
- USG Defense Training Sites
- Defense Training Sites

Full Corporate Resourcing for Training Around the World
What is Boeing Training & Professional Services doing?
Inspiring and developing tomorrow’s workforce